

AMENDMENTS TO THE CLAIMS:

Please cancel claims 1-42 without prejudice and add claims 43-82, as follows:

1-42. (Cancelled).

43. (New) An access point for communicatively coupling a first roaming wireless device and a second roaming wireless device to a wired link, the access point comprising:

a control circuit;

a wired transceiver that is communicatively coupled to the control circuit and that communicatively couples to the wired link;

a first wireless transceiver that is communicatively coupled to the control circuit, the first wireless transceiver operating on a first wireless communication channel to communicatively couple with the first roaming wireless device;

a second wireless transceiver that is communicatively coupled to the control circuit, the second wireless transceiver operating on a second wireless communication channel to communicatively couple with the second roaming device; and

the control circuit accommodates communications between the first wireless transceiver and the second wireless transceiver.

44. (New) The access point of claim 43, further comprising a bus interface communicatively coupling the control circuit to the first and second wireless transceivers and the wired transceiver.

45. (New) The access point of claim 44, wherein the bus interface is substantially compliant with a bus standard.

46. (New) The access point of claim 45, wherein the bus standard is a PCI standard.

47. (New) The access point of claim 43, wherein the wired transceiver accommodates communication with an Ethernet network.

48. (New) The access point of claim 43, wherein the wired transceiver accommodates communication with a token-ring network.

49. (New) The access point of claim 43, wherein the wired transceiver accommodates communication with an asynchronous transfer mode network.

50. (New) The access point of claim 43, wherein the wired transceiver accommodates communication with a packetized network.

51. (New) The access point of claim 43, wherein the first wireless transceiver supports a substantially non-deterministic media access protocol and the second wireless transceiver supports a substantially deterministic media access protocol.

52. (New) The access point of claim 43, wherein the first wireless transceiver and the second wireless transceiver support substantially distinct non-deterministic media access protocols.

53. (New) The access point of claim 43, wherein the first wireless transceiver and the second wireless transceiver operate independently to form a first communication cell and a second communication cell.

54. (New) The access point of claim 43, wherein the control circuit synchronizes transmissions on the first wireless communication channel and the second wireless communication channel to minimize conflicts between transmissions on one wireless transceiver and receipts on the other wireless transceiver.

55. (New) The access point of claim 43, wherein the wired link is a local area network.

56. (New) The access point of claim 43, wherein the first wireless transceiver and the second wireless transceiver have substantially different operating characteristics.

57. (New) A communication network comprising:
a wired LAN;
a plurality of access points coupled via the wired LAN, each of the plurality of access points comprising:
a control circuit;
a wired transceiver that is communicatively coupled to the control circuit and that communicatively couples to the wired LAN;
a first wireless transceiver that is communicatively coupled to the control circuit and operates on a first wireless communication channel;
a second wireless transceiver that is communicatively coupled to the control circuit and operates on a second wireless communication channel; and
the control circuit accommodates communications between the first wireless transceiver and the second wireless transceiver;
a first roaming wireless device comprising a third wireless transceiver that operates on the first wireless communication channel; and
a second roaming wireless device comprising a fourth wireless transceiver that operates on the second wireless communication channel.

58. (New) The communication network of claim 57, wherein the first roaming wireless device operates only on the first wireless communication channel.

59. (New) The communication network of claim 57, wherein the first roaming wireless device and the second roaming wireless device have different transmission characteristics.

60. (New) The communication network of claim 57, wherein the first roaming wireless device and the second roaming wireless device incorporate different data throughput capabilities.

61. (New) The communication network of claim 57, wherein the first roaming wireless device and the second roaming wireless device operate independently to form a first communication cell and a second communication cell, respectively.

62. (New) The communication network of claim 61, wherein the radius of the first communication cell substantially equals the radius of the second communication cell.

63. (New) The communication network of claim 57, wherein the wired transceiver accommodates communication with an Ethernet network.

64. (New) The communication network of claim 57, wherein the wired transceiver accommodates communication with a token-ring network.

65. (New) The communication network of claim 57, wherein the wired transceiver accommodates communication with an asynchronous transfer mode network.

66. (New) The communication network of claim 57, wherein the wired transceiver accommodates communication with a packetized network.

67. (New) The communication network of claim 57, wherein the first wireless transceiver supports a substantially non-deterministic media access protocol and the second wireless transceiver supports a substantially deterministic media access protocol.

68. (New) The communication network of claim 57, wherein the first wireless transceiver and the second wireless transceiver support substantially distinct non-deterministic media access protocols.

69. (New) The communication network of claim 57, wherein the third wireless transceiver is a PCMCIA card.

70. (New) The communication network of claim 57, wherein the first wireless communication channel is a radio frequency (RF) channel.

71. (New) A communication system, comprising:
a plurality of access points, each of the plurality of access points comprising:
a control circuit;
a wired transceiver that communicatively couples the control circuit to a wired LAN;
a first wireless transceiver that is communicatively coupled to the control circuit, the first wireless transceiver operating pursuant to a substantially deterministic, time bounded wireless communication protocol; and
a second wireless transceiver that is communicatively coupled to the control circuit, the second wireless transceiver operating pursuant to a substantially non-deterministic contention access wireless communication protocol; and
a plurality of roaming wireless devices that each wirelessly communicate with at least one of the first and second wireless transceivers.

72. (New) An access point for establishing communications with a wired link, the access point comprising:
a PCMCIA interface capable of modularly receiving a plurality of wireless transceivers for operating on independent wireless communication channels;
a wired transceiver operable on the wired link;
interface circuitry operable to communicate with wireless transceivers modularly received via the PCMCIA interface and with the wired transceiver; and
processing circuitry coupled to the interface circuitry to control communications by the wireless transceivers modularly received via the PCMCIA interface and by the wired transceiver.

73. (New) The access point of claim 72, wherein the interface circuitry comprises a PCI bus interface for communicating with the wireless transceivers modularly received via the PCMCIA interface and with the wired transceiver according to a PCI bus standard.

74. (New) The access point of claim 72, wherein the processing circuitry is programmed with a network configuration to selectively route data through the interface circuitry to the plurality of wireless transceivers and the wired link.

75. (New) The access point of claim 72, wherein the plurality of wireless transceivers operate independently to form a plurality of communication cells.

76. (New) The access point of claim 75, wherein the plurality of communication cells are formed by the plurality of wireless transceivers operating at different data rates.

77. (New) The access point of claim 75, wherein the plurality of communication cells are formed by the plurality of wireless transceivers operating at different power levels.

78. (New) A communication system, comprising:
a plurality of access points capable of being coupled via a wired LAN,
each of the plurality of access points comprising:
a control circuit;
a wired transceiver that communicatively couples the control circuit to the
wired LAN; and
a wireless transceiver system that is communicatively coupled to the
control circuit, the wireless transceiver system contemporaneously operating on first and
second communication channels; and

a plurality of roaming wireless devices that each wirelessly communicate with the wireless transceiver system using at least one of the first and second communication channels.

79. (New) An access point for establishing communications with a wired link, the access point comprising:

an interface system for modularly receiving a plurality of wireless transceivers for operating on independent wireless communication channels;

interface circuitry operable to communicate with wireless transceivers modularly received via the interface system; and

processing circuitry that couples to the interface circuitry to control communications effected by wireless transceivers modularly received via the interface system.

80. (New) The access point of claim 79, wherein the interface system is configured to receive a plurality of cards each carrying at least one of the plurality of wireless transceivers.

81. (New) The access point of claim 80, wherein the plurality of wireless transceivers carried by the plurality of cards have substantially different operating characteristics.

82. (New) An access point for establishing communications with a wired link, the access point comprising:

receiving means for modularly receiving a plurality of wireless transceivers for operating on independent wireless communication channels;

interface means for communicating with wireless transceivers modularly received by the receiving means; and

processing means coupled to the interface means for controlling communications by wireless transceivers modularly received by the receiving means.